



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,529	11/24/2003	Edward Alan Sierecki	P24418	1987
7055 7590 11/28/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
			EXAMINER PASIA, REDENTOR M	
			ART UNIT 2616	PAPER NUMBER
			NOTIFICATION DATE 11/28/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary	Application No. 10/718,529	Applicant(s) SIERECKI, EDWARD ALAN	
	Examiner Redentor M. Pasia	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/17/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's amendment filed on September 21, 2007 has been entered. Claims 1, 8 and 14 have been amended. No claims have been canceled. Claims 1-18 are still pending in this application, with claims 1, 8 and 14 being independent.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

Art Unit: 2616

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/704,715. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

As to claim 1 of the application, claim 1 of the co-pending application shows all of the elements claimed in the application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 8, 12-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 7-8 of copending Application No. 10/704,715 in view of Branth et al. (US 7,075,928 B1; hereinafter Branth).

As to claim 8 of the application, claim 3 of the co-pending application shows at least one platform including a layer two switching component, a layer three switching component and a physical loopback between the layer two switching component and the layer three switching component; and wherein a failure of the connection, which extends to the platform, is protected by layer two network failure restoration. However, claim 3 of co-pending application does not show a plurality of layer two switches; and at least one connection between one of the layer two switches, which communicates with a customer edge device, and the layer two switching component of the platform.

Branth shows a network (Figure 1), comprising: a plurality of layer two switches (Figure 1; ATM switches 24-27); and at least one connection between one of the layer two switches, which communicates with a customer edge device (Figure 1). It would have been obvious to one of ordinary skill in the art to modify the network stated in claim 3 of the co-pending application by having the layer two switches and corresponding connections of Branth in order to provide a connection to multiple users and systems.

Art Unit: 2616

As to claim 12 of the application, claim 7 (in relation to modified claim 3) of the co-pending application shows that the layer two switching component of the platform comprises an ATM switch.

As to claim 13 of the application, claim 8 (in relation to modified claim 3) of the co-pending application shows that the layer three switching component of the platform comprises an IP router.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng et al. (US 6611522 B1; hereinafter Zheng) in view of DiMambro et al. (US 2004/0143781 A1; hereinafter DiMambro) in further view of Drake, Jr. et al. (US 6895024 B1; hereinafter Drake).

As to claim 1, Zheng shows a multi service platform (figure 1; node 10), comprising: a layer two switching component (figure 13; ATM Lookup 220); a layer three switching component (figure 13; IP Route Lookup 244); layer two capabilities and layer three capabilities are integrated together (col. 3, lines 25-28) and a layer two switch (col. 3, lines 62-67). However, Zheng does not show a physical loopback connecting the layer two switching component and the layer three switching component and the step to re-route a circuit, if there is a failure in the interface between a layer two switch and the multi-service platform.

DiMambro shows a loopback connected to port 120 of Network Adapter 102 in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the switching platform of Zheng by applying the optical loopback of DiMambro as a redundant connection between the components of Zheng in order to have a more reliable switching system. However, DiMambro does not show the step to re-route a circuit, if there is a failure in the interface between a layer two switch and the multi-service platform.

Drake shows the step to re-route a circuit if there is a failure in an interface (Figure 3, 4; col. 8, line 17 to col. 9, line 17; defines the procedures necessary to switch from a primary component to its corresponding secondary component in the event of a primary component failure. If a primary fabric fails, switch the fabric that all affected netmods receive from; A loopback connection 50 is installed in each fabric 46 with the VCF_Add_Output method, using a unique backplane 48 routeword and the netmod mask specifying the control port. Packets are sent to the control port with the backplane

48 routeword pretended.). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the switching platform of modified Zheng to apply the circuit re-routing of Drake (as discussed above) between a layer two switch and the multi-service platform in order to have a more reliable switching system.

As to claim 2, further modified Zheng shows that the physical loopback comprises a fiber jumper cable (DiMambro: Par. 0021, that Port 120 allows the adapter to be couple to a suitable communication link (e.g. fiber) and that the loopback plug maybe connected in Port 120 as shown in Figure 1.).

As to claim 3, further modified Zheng shows a line card comprising the layer two switching component and the layer three switching component (Zheng: Figure 5; Line Card 59).

As to claim 4, further modified Zheng shows that both ends of the loopback terminate on the line card (DiMambro: Figure 1).

As to claim 5, further modified Zheng shows at least one additional physical loopback (Drake: Figure 3, 4, Fabric Loopback Data Path, Loopback 50) connecting to another layer three switching component on the line card (Zheng: Figure 4, 9, 13; implement Drake's additional loopback with Zheng's line cards. Zheng, DiMambro and

Art Unit: 2616

Drake already combined in claim 1), wherein redundancy for the layer three functionality is provided on the line card (Drake: Figure 3, 4; col. 8, line 17 to col. 9, line 17; defines the procedures necessary to switch from a primary component to its corresponding secondary component in the event of a primary component failure. If a primary fabric fails, switch the fabric that all affected netmods receive from; A loopback connection 50 is installed in each fabric 46 with the VCF_Add_Output method, using a unique backplane 48 routeword and the netmod mask specifying the control port. Packets are sent to the control port with the backplane 48 routeword pretended.).

As to claim 6, further modified Zheng shows at least one additional line card comprising at least one additional layer two switching component and at least one additional layer three switching component, wherein the at least one additional line card provides redundancy (Zheng: Figure 4).

As to claim 7, further modified Zheng shows one additional physical loopback (Drake: Figure 3,4) terminating on the at least one additional line card (DiMambro: Figure 1; Zheng, DiMambro and Drake already combined. Refer to claim 1 rejection.).

As to claim 8, Zheng shows a network (col. 9, lines 22-27; The communication node may be employed in IP networks, such as the internet, intranet or extranet, or

more traditional switching environments), comprising: at least one platform (Figure 2) including a layer two switching component (Figure 4; figure 13; ATM Lookup 220); a layer three switching component (figure 13; IP Route Lookup 244); customer edge device (col. 2, lines 26-27; connecting smaller Access Points of Presence.); at least one connection between one of the layer two switches (Figure 4, 7-9, 13; VC 62; Figure 18-19; col. 19, lines 66-67; A VC is a connection between two communicating ATM entities.), which communicates with a customer edge device (col. 15, lines 56-59; col. 16, lines 25-33; The edge routers test the packets based on the customer profile while the core routers only test whether a given packet is "in" or "out" of profile.,) and the layer two switching component of the platform (Figure 4), and a layer two switch (col. 3, lines 62-67). However, Zheng does not show a plurality of layer two switches; a physical loopback between the layer two switching component and the layer three switching component; wherein a failure of the connection, which extends to the platform, is protected by layer two network failure restoration by re-routing the circuit if there is a failure in the interface between a layer two switch and the platform.

DiMambro shows a loopback connected to port 120 of Network Adapter 102 in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the switching platform of Zheng by applying the optical loopback of DiMambro as a redundant connection between the components of Zheng in order to have a more reliable switching system. However, DiMambro does not show the step to re-route a circuit, if there is a failure in the interface between a layer two switch and the multi-service platform.

Drake shows that wherein a failure of the connection, which extends to the platform, is protected by layer two network failure restoration by re-routing the circuit if there is a failure in the interface between a layer two switch and the platform (Figure 3, 4; col. 8, line 17 to col. 9, line 17; defines the procedures necessary to switch from a primary component to its corresponding secondary component in the event of a primary component failure. If a primary fabric fails, switch the fabric that all affected netmods receive from; A loopback connection 50 is installed in each fabric 46 with the VCF_Add_Output method, using a unique backplane 48 routeword and the netmod mask specifying the control port. Packets are sent to the control port with the backplane 48 routeword pretended.). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the switching platform of Zheng by implementing the circuit re-routing of Drake (as discussed above) between a layer two switch and the multi-service platform in order to have a more reliable switching system.

As to claim 9, further modified Zheng shows that the physical loopback comprises a fiber jumper cable (DiMambro: Par. 0021, that Port 120 allows the adapter to be couple to a suitable communication link (e.g. fiber) and that the loopback plug maybe connected in Port 120 as shown in Figure 1.).

As to claim 10, further modified Zheng shows ATM switches (Drake: Figure 1).

As to claim 11, further modified Zheng show a permanent virtual connection (Zheng: Figure 4, 7-9, 13; VC 62; Figure 18-19; col. 19, lines 66-67; A VC is a connection between two communicating ATM entities.).

As to claim 12, further modified Zheng shows that the layer two switching component of the platform comprises an ATM switch (Zheng: col. 8, lines 5-52; ATM data cell switching facility).

As to claim 13, further modified Zheng shows that the layer three switching component of the platform comprises an IP router (Zheng: col. 8, lines 5-52; ATM data cell switching facility).

Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis (US 6909720 B1; hereinafter Willis) in view of DiMambro et al. (US 2004/0143781 A1; hereinafter DiMambro) in further view of Drake, Jr. et al. (US 6895024 B1; hereinafter Drake).

As to claim 14, Willis shows a method for routing traffic across a layer two network having three routing capabilities (abstract; Figure 4, 10; col. 1, lines 48-58; col. Lines 9-42; The device employed in the illustrative embodiment can handle both ATM

cells and IP packets in a single device and also can handle IP packets carried by ATM cells.), comprising: routing traffic from a customer across the layer two network to a layer two switching component in a platform; routing traffic from the layer two switching component to a layer three switching component in the platform; determining, at the layer three switching component, where to route the traffic; returning the traffic to the layer two switching component; and forwarding the traffic to a destination based upon the determined route (col. 2, lines 15-24; col. 6, lines 12-22, lines 48-57; Figure 4 and 10); and a layer two switch (col. 3, lines 59 to col. 4, line 7). However, Willis does not show a physical loopback and the step wherein a circuit is re-routed, if there is a failure in the interface between a layer two switch and the platform.

DiMambro shows a loopback connected to port 120 of Network Adapter 102 in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Willis by applying the optical loopback of DiMambro as a redundant connection between the components of Willis in order to have a more reliable switching system. However, DiMambro does not show the step to re-route a circuit, if there is a failure in the interface between a layer two switch and the multi-service platform.

Drake shows the step to re-route a circuit if there is a failure in an interface (Figure 3, 4; col. 8, line 17 to col. 9, line 17; defines the procedures necessary to switch from a primary component to its corresponding secondary component in the event of a primary component failure. If a primary fabric fails, switch the fabric that all affected netmods receive from; A loopback connection 50 is installed in each fabric 46 with the

Art Unit: 2616

VCF_Add_Output method, using a unique backplane 48 routeword and the netmod mask specifying the control port. Packets are sent to the control port with the backplane 48 routeword pretended.). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of modified Willis to apply the circuit re-routing of Drake (as discussed above) between a layer two switch and the multi-service platform in order to have a more reliable switching system.

As to claim 15, further modified Willis shows that the layer two network comprises an ATM network (Willis: col. 1, lines 48-58).

As to claim 16, further modified Willis shows which the layer three switching component and the layer two switching component are on a line card (Willis; Figure 4-5, 10).

As to claims 17 and 18, further modified Willis shows ATM lookup 220 (as to claim 17) and IP Route Lookup, Forward, Policing 244 (as to claim 18) in Willis Figure 13.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection. The examiner bases his new grounds of rejection based on the following:

Claims 1-13 are rejected under Zheng et al. (US 6611522 B1) in view of DiMambro et al. (US 2004/0143781 A1) in further view of Drake, Jr. et al. (US 6895024 B1).

Claims 14-18 are rejected under Willis (US 6909720 B1) in view of DiMambro et al. (US 2004/0143781 A1) in further view of Drake, Jr. et al. (US 6895024 B1).

The Double Patenting rejection issued in the last Office Action dated June 9, 2007, still holds for the current Office Action since no action was taken by the Applicant.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Branth et al. (US 7075928 B1) – note abstract.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Redentor M. Pasia whose telephone number is 571-272-9745. The examiner can normally be reached on M-F 7:30am to 4:00pm EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on (571)272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Redentor Pasia



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600